This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. **(Currently Amended)** A method for screening for analytes comprising the steps of

a) disposing a plurality of analytes to be screened within individually identifiable containers such that the analytes remain isolated from each other, wherein the individually identifiable containers are an array of capillary tubes each of which is identifiable according to its position within the array;

b) dispensing the analytes through the open ends of the capillary tubes onto at least one solid support to maintain the transferred contents of each container separate from those of each other container, wherein the surface of said solid support is coated with a layer of cells or a Langmuir-Blodgett film and wherein said analytes are simultaneously applied onto the at least one solid support;

c) contacting said at least one analyte-carrying solid support with targets provided in a semi-solid or liquid medium, whereby said analytes are released from the at least one solid support to the targets, wherein each analyte when applied to the solid support diffuses thereon so as to produce a concentration gradient; and

d) measuring analyte-target interactions, wherein said analyte-target interactions are measured using one or more of the following methods: microscopic, luminometric, densitometric, isotopic, and physical measurements.

2-4. **(Cancelled)**

5. **(Previously Presented)** The method according to claim 1, wherein the solid support is of a substantially flat, disc-, rectangular- or square-shape.

6-9 **(Cancelled)**

10. **(Previously Presented)** The method according to claim 1, wherein the surface of the solid support onto which the analytes are applied is selected from polymers, ceramics, metals, cellulose and glass.

11-17. **(Cancelled)**

18. **(Previously Presented)** The method according to claim 1, wherein the solid support is an information carrier which carries information in electronic, magnetic or digitized form.

19-23. **(Cancelled)**

24. **(Previously Presented)** The method according to claim 1 wherein steps a) and b) are carried out simultaneously.

25. **(Cancelled)**

26. **(Previously Presented)** The method according to claim 1, wherein each analyte is applied to a rod or spherically shaped solid support.

27-28. **(Cancelled)**

29. **(Previously Presented)** The method according to claim 1 wherein the analytes are chemical compounds, antigens, antibodies, DNA-probes, cells and beads and liposomes carrying an analyte of interest.

30. **(Previously Presented)** The method according to claim 29, wherein the analytes, when applied to the solid support, are dissolved in an organic or inorganic solvent.

31. **(Cancelled)**

32. **(Previously Presented)** The method according to claim 1 wherein the analyte is a chemical compound.

33. **(Previously Presented)** The method according to claim 1 wherein said targets are selected from prokaryotic cells, eukaryotic cells, viruses, molecules, receptors, beads, and combinations thereof.

34. **(Previously Presented)** The method according to claim 33, wherein the targets are cells equipped with reporter functions.

35. **(Previously Presented)** The method according to claim 34, wherein said analyte target interactions are measurable by the effects of the analytes on the reporter functions of the cells.

36-68. **(Cancelled)**